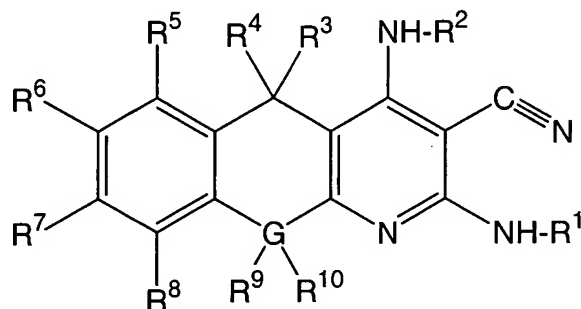


CLAIM AMENDMENTS

The following listing of claims will replace all prior versions and listing of claims in the application.

1. **(currently amended)** An aminocyanopyridine compound having the structure:

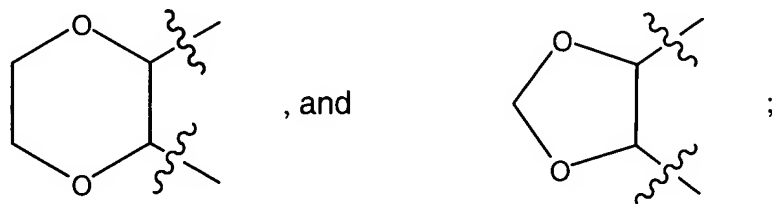


wherein:

each of R¹, R², [[R³, R⁴,]] R⁵, R⁶, R⁷, and R⁸ is independently selected from the group consisting of hydrogen, hydroxy, amino, halo, nitro, branched or unbranched C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, hydroxy C₁-C₆ alkyl, hydroxy C₁-C₆ alkoxy, C₁-C₆ alkoxy C₁-C₆ alkoxy, C₁-C₆ alkoxy C₁-C₆ alkyl, C₁-C₆ alkenoxy, branched or unbranched amino C₁-C₆ alkyl, diamino C₂-C₆ alkyl, C₁-C₆ alkylamino C₁-C₆ alkyl, C₁-C₆ alkylamino, di-(C₁-C₆ alkyl)amino, C₁-C₄ alkoxyarylamino, C₁-C₄ alkoxyalkylamino, amino C₁-C₆ alkoxy, di-(C₁-C₄ alkylamino, C₂-C₆ alkoxy, di-(C₁-C₆ alkyl)amino C₁-C₆ alkyl, C₁-C₆ alkylamino C₁-C₆ alkoxy, halo C₁-C₆ alkoxy, dihalo C₁-C₆ alkoxy, trihalo C₁-C₆ alkoxy, cyano C₁-C₆ alkyl, dicyano C₁-C₆ alkyl, cyano C₁-C₆ alkoxy, dicyano C₁-C₆ alkoxy, carbamyl C₁-C₄ alkoxy, heterocyclyl C₁-C₄ alkoxy, heteroaryl C₁-C₄ alkoxy, sulfo, sulfamyl, C₁-C₄ alkylaminosulfonyl, hydroxy C₁-C₄ alkylaminosulfonyl, di-(C₁-C₄ alkyl)aminosulfonyl, C₁-C₄ alkylthio, C₁-C₄ alkylsulfonyl, C₁-C₄ alkylsulfinyl, aryl, aryl C₁-C₆ alkyl, heterocyclyl C₁-C₆ alkyl, heteroaryl C₁-C₆ alkyl, heterocyclyl C₁-C₆ alkoxy, heteroaryl C₁-C₆ alkoxy, aryl C₁-C₆ alkoxy, where the aryl ring can be substituted or unsubstituted, and, if substituted, the substituent group is selected from one or more of the group consisting of C₁-C₆ alkyl, halo, amino, and C₁-C₆ alkoxy, substituted or unsubstituted C₃-C₆ cyclyl, C₃-C₆ heterocyclyl, and, if substituted, the substituent group is

selected from one or more of the group consisting of C₁-C₆ alkyl, C₁-C₆ alkoxy, halo, amino, and where the C₃-C₆ heterocyclyl ring contains O, S, or N, branched or unbranched C₁-C₆ alkoxycarbonyl C₁-C₆ alkoxy, and carboxy, carboxy C₁-C₆ alkoxy, carboxy C₁-C₆ alkyl, hydroxy C₁-C₄ alkoxycarbonyl, C₁-C₄ alkoxycarbonyl,

where R⁶ and R⁷ are such that they optionally join to form a ring system of the type selected from



R³ and R⁴ are independently selected from the group consisting of hydrogen, hydroxy, amino, halo, nitro, branched or unbranched C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, hydroxy C₁-C₆ alkyl, hydroxy C₁-C₆ alkoxy, C₁-C₆ alkoxy C₁-C₆ alkoxy, C₁-C₆ alkoxy C₁-C₆ alkyl, C₁-C₆ alkenoxy, branched or unbranched amino C₁-C₆ alkyl, diamino C₂-C₆ alkyl, C₁-C₆ alkylamino C₁-C₆ alkyl, C₁-C₆ alkylamino, di-(C₁-C₆ alkyl)amino, C₁-C₄ alkoxyarylamino, C₁-C₄ alkoxyalkylamino, amino C₁-C₆ alkoxy, di-(C₁-C₄ alkylamino, C₂-C₆ alkoxy, di-(C₁-C₆ alkyl)amino C₁-C₆ alkyl, C₁-C₆ alkylamino C₁-C₆ alkoxy, halo C₁-C₆ alkoxy, dihalo C₁-C₆ alkoxy, trihalo C₁-C₆ alkoxy, cyano C₁-C₆ alkyl, cyano C₁-C₆ alkoxy, dicyano C₁-C₆ alkoxy, carbamyl C₁-C₄ alkoxy, heterocyclyl C₁-C₄ alkoxy, heteroaryl C₁-C₄ alkoxy, sulfo, sulfamyl, C₁-C₄ alkylaminosulfonyl, hydroxy C₁-C₄ alkylaminosulfonyl, di-(C₁-C₄ alkyl)aminosulfonyl, C₁-C₄ alkylthio, C₁-C₄ alkylsulfonyl, C₁-C₄ alkylsulfinyl, aryl, aryl C₁-C₆ alkyl, heterocyclyl C₁-C₆ alkyl, heteroaryl C₁-C₆ alkyl, heterocyclyl C₁-C₆ alkoxy, heteroaryl C₁-C₆ alkoxy, aryl C₁-C₆ alkoxy, where the aryl ring can be substituted or unsubstituted, and, if substituted, the substituent group is selected from one or more of the group consisting of C₁-C₆ alkyl, halo, amino, and C₁-C₆ alkoxy, substituted or unsubstituted C₃-C₆ cyclyl, C₃-C₆ heterocyclyl, and, if substituted, the substituent group is selected from one or more of the group consisting of C₁-C₆ alkyl, C₁-C₆ alkoxy, halo, amino, and where the C₃-C₆ heterocyclyl ring contains O, S, or N, branched

or unbranched C₁-C₆ alkoxy carbonyl C₁-C₆ alkoxy, and carboxy, carboxy C₁-C₆ alkoxy, carboxy C₁-C₆ alkyl, hydroxy C₁-C₄ alkoxy carbonyl, C₁-C₄ alkoxy carbonyl;

G is selected from the group consisting of oxygen, sulfur, and nitrogen;
when G is oxygen, R⁹ and R¹⁰ are absent;
when G is sulfur, each of R⁹ and R¹⁰ is optionally absent, or is oxo;
when G is nitrogen, R⁴ is hydrogen, R⁹ is absent, and R¹⁰ is C₁-C₄-alkyl.

2. **(currently amended)** The aminocyanopyridine having the structure shown in claim 1, where:

R¹ is selected from the group consisting of hydrogen, branched or unbranched alkyl, alkenyl, alkynyl, alkoxy, alkylaryl, arylalkyl, carboxy, carboxyalkyl, hydroxyalkyl, ~~alkyl carboxy~~ **alkoxy carbonyl**, aryl, amino, aminoalkyl, alkylamino, halo, alkylaminoalkyl, alkoxy, alkoxyalkyl, monocyclyl, bicyclyl, polycyclyl, and heterocyclyl;

R² is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, alkoxy, hydroxyalkyl, alkylaryl, arylalkyl, alkoxyaryl, aminoalkyl, alkylaminoalkyl, arylaminoalkyl, alkoxyalkyl, ~~alkyl carboxy~~ **alkoxy carbonyl**, and carboxyalkyl;

R³ is selected from the group consisting of hydrogen, ~~diacyanoalkyl~~, and substituted or unsubstituted heterocyclyl and cyclyl, where substituents, if any, comprise halo moieties;

R⁴ is selected from the group consisting of hydrogen, ~~diacyanoalkyl~~, and substituted or unsubstituted heterocyclyl and cyclyl, where substituents, if any, comprise halo moieties;

R⁵ is selected from the group consisting of hydrogen, alkoxy, halo, alkyl, alkenyl, ~~alkyl~~ **alkynyl**, arylalkyl, and alkylaryl;

R⁶ is selected from the group consisting of hydrogen, hydroxy, alkoxy, alkyl, alkenyl, alkynyl, amino, alkylamino, arylamino, alkylaminoalkyl, carboxy, aminoalkoxy, halo, ~~alkyl carboxyalkyl~~ **alkoxy carbonylalkyl**, alkylamino, aminoalkyl, nitro, aryl, arylalkyl, alkylaryl, and arylamino;

R⁷ is selected from the group consisting of hydrogen, hydroxy, alkoxy, alkenoxy, hydroxyalkoxy, alkoxyalkoxy, aminoalkoxy, heterocyclylalkyl, heterocyclylalkoxy, carboxyalkoxy, alkylaminoalkoxy, and ~~alkyl carboxyalkoxy~~ **alkoxy carbonylalkoxy**;

where the R⁶ and R⁷ groups optionally join to form a six membered heterocyclic ring;

R⁸ is selected from the group consisting of hydrogen, hydroxy, halo, nitro, amino, alkyl, alkoxy, heterocyclalkoxy, carboxyalkoxy, pyrrolidylethoxy, carboxymethoxy, hydroxyalkoxy, aminoalkoxy, ~~alkylcarboxy~~ alkoxycarbonyl, alkylaminoalkyl, carboxy, and heterocyclalkyl; and

G is selected from the group consisting of oxygen, sulfur, and nitrogen;

when G is oxygen, R⁹ and R¹⁰ are absent;

when G is sulfur, each of R⁹ and R¹⁰ is optionally absent, or is oxo;

when G is nitrogen, R⁹ is absent, and R¹⁰ is C₁-C₄-alkyl.

3. **(currently amended)** The aminocyanopyridine having the structure shown in claim 1, where:

R¹ is selected from the group consisting of hydrogen, ethyl, dimethylaminoethyl, butyl, propyl, methoxyethyl, tetramethylaminoethyl, and carboxymethyl;

R² is selected from the group consisting of hydrogen, hydroxyethyl, propyl, ethyl, methyl, 4-methoxyphenyl, ethoxyethyl, aminoethyl, phenylmethyl, dimethylaminoethyl, phthalaminoethyl, butyl, methoxyethyl, tetramethylaminoethyl, and carboxymethyl;

R³ is selected from the group consisting of hydrogen, ~~dicyanomethyl~~, 2-fluorophenyl, phenyl, and 3-fluorophenyl.

R⁴ is selected from the group consisting of hydrogen, ~~dicyanomethyl~~, 2-fluorophenyl, phenyl, and 3-fluorophenyl;

R⁵ is selected from the group consisting of hydrogen, hydroxy, methoxy, bromo, and 2-pyridomethyl;

R⁶ is selected from the group consisting of hydrogen, hydroxy, methoxy, amino, carboxy, diaminoethoxy, bromo, propoxy, isobutylcarboxymethoxy, dimethylamino, nitro, phenyl, chloro, pyridylmethyl, and fluoro;

R⁷ is selected from the group consisting of hydrogen, hydroxy, methoxy, hydroxyethoxy, ethoxyethoxy, ethoxy, aminoethoxy, morpholinoethoxy, carboxymethoxy, N-pyrrolidylethoxy, dimethylaminoethoxy, pyridylmethyl, 2-propenoxy, and isobutylcarboxymethoxy,

where the R⁶ and R⁷ groups optionally join to form a six membered heterocyclic ring;

R⁸ is selected from the group consisting of hydrogen, hydroxy, fluoro, methoxy, nitro, amino, pyrrolidylethoxy, carboxymethoxy, methyl, hydroxyethoxy, aminoethoxy, 4-pyridylmethoxy, isobutyl, ~~ethylcarboxy~~ ethoxycarbonyl, dimethylaminoethoxy, carboxy, bromo, and pyrridylmethyl; and

G is selected from the group consisting of oxygen, sulfur, and nitrogen;

when G is oxygen, R⁹ and R¹⁰ are absent;

when G is sulfur, each of R⁹ and R¹⁰ is optionally absent, or is oxo;

when G is nitrogen, R⁹ is absent, and R¹⁰ is -CH₃.

4. **(currently amended)** The aminocyanopyridine having the structure shown in claim 1, where:

R¹ is selected from the group consisting of hydrogen, and C₁-C₂ ~~alky~~ alkyl;

R² is selected from the group consisting of hydrogen, C₁-C₃ alkyl, hydroxy C₁-C₂ alkyl, C₁-C₂ alkoxyphenyl, C₁-C₂ alkoxy C₁-C₂ alkyl, amino C₁-C₂ alkyl, phenyl C₁-C₂ alkyl, and di C₁-C₂ alkylamino C₁-C₂ alkyl;

R³ and R⁴ are each independently selected from the group consisting of hydrogen, ~~di~~ciano C₁-C₂ ~~alkyl~~, and halophenyl;

R⁵ is selected from the group consisting of hydrogen, and hydroxy;

R⁶ is selected from the group consisting of hydrogen, hydroxy, C₁ - C₃ alkoxy, amino, nitro, carboxy, diamino C₁ - C₂ alkoxy, halo, propenoxy, iso C₃ - C₄ ~~alkylcarboxy~~ alkoxycarbonyl C₁ - C₂ alkoxy, di C₁ - C₂ alkylamino, and phenyl;

R⁷ is selected from the group consisting of hydrogen, hydroxy, C₁ - C₃ alkoxy, hydroxy C₁ - C₂ alkoxy, C₁ - C₂ alkoxy C₁ - C₂ alkoxy, amino C₁ - C₂ alkoxy, morpholino C₁ - C₂ alkoxy, carboxyl C₁ - C₂ alkoxy, pyrrolidyl C₁ - C₂ alkoxy, di C₁ - C₂ alkylamino C₁ - C₂ alkoxy, pyrrolidyl C₁ - C₂ alkyl, iso C₃ - C₄ ~~alkylcarboxy~~ alkoxycarbonyl C₁ - C₂ alkoxy, and ~~2-~~ propenoxy 2-propenoxy,

where the R⁶ and R⁷ groups optionally join to form a six membered heterocyclic ring;

R⁸ is selected from the group consisting of hydrogen, hydroxy, halo, C₁-C₂ alkyl, C₁-C₂ alkoxy, nitro, amino, pyrrolidyl C₁-C₂ alkoxy, carboxy C₁-C₂ alkoxy, hydroxy C₁-C₂ alkoxy, and amino C₁-C₂ alkoxy; and

G is selected from the group consisting of oxygen and sulfur;
when G is sulfur, each of R⁹ and R¹⁰ is optionally absent, or is oxo;
when G is oxygen, R⁹ and R¹⁰ are absent.

5. **(currently amended)** The aminocyanopyridine having the structure shown in claim 1, where:

R¹ is hydrogen;

R² is selected from the group consisting of hydrogen, C₁ - C₃ alkyl, hydroxy C₁ - C₂ alkyl, C₁ - C₂ alkoxyphenyl, C₁ - C₂ alkoxy C₁ - C₂ alkyl, amino C₁ - C₂ alkyl, phenyl C₁ - C₂ alkyl, and di C₁ - C₂ alkylamino C₁ - C₂ alkyl;

R³ and R⁴ are each ~~independently selected from the group consisting of hydrogen, and~~
~~diethyl C₁ - C₂ alkyl.~~

R⁵ is selected from the group consisting of hydrogen, and hydroxy;

R⁶ is selected from the group consisting of hydrogen, hydroxy, C₁-C₂ alkoxy, amino, carboxy, nitro, diamino C₁-C₂ alkoxy, halo, 2-propenoxy, iso C₃-C₄ ~~alkylcarboxy~~
alkoxycarbonyl C₁-C₂ alkoxy, di C₁-C₂ alkylamino, and phenyl;

R⁷ is selected from the group consisting of hydrogen, hydroxy, C₁ - C₂ alkoxy, hydroxy C₁-C₂ alkoxy, C₁-C₂ alkoxy C₁-C₂ alkoxy, amino C₁-C₂ alkoxy, morpholino C₁-C₂ alkoxy, carboxyl C₁-C₂ alkoxy, pyrrolidyl C₁-C₂ alkoxy, di C₁-C₂ alkylamino C₁-C₂ alkoxy, pyrrolidyl C₁-C₂ alkyl, iso C₃-C₄ ~~alkylcarboxy~~ alkoxycarbonyl C₁-C₂ alkoxy, and 2-propenoxy;

wherein the R⁶ and R⁷ groups optionally join to form a six membered heterocyclic ring;

R⁸ is selected from the group consisting of hydrogen, hydroxy, halo, C₁-C₂ alkoxy, nitro, amino, pyrrolidyl C₁-C₂ alkoxy, and carboxy C₁-C₂ alkoxy; and

G is selected from the group consisting of oxygen and sulfur;

when G is sulfur, each of R⁹ and R¹⁰ is optionally absent, or is oxo;

when G is oxygen, R⁹ and R¹⁰ are absent.

6. **(currently amended)** The aminocyanopyridine having the structure shown in claim 1, where:

R¹ is hydrogen;

R^2 is selected from the group consisting of hydrogen, C_1 - C_3 alkyl, hydroxy C_1 - C_2 alkyl, C_1 - C_2 alkoxyphenyl, C_1 - C_2 alkoxy C_1 - C_2 alkyl, amino C_1 - C_2 alkyl, and phenyl C_1 - C_2 alkyl;

R^3 and R^4 are each ~~independently selected from the group consisting of~~ hydrogen, ~~and~~ ~~di~~cyano ~~C_1 - C_2 alkyl~~.

R^5 is selected from the group consisting of hydrogen, and hydroxy;

R^6 is selected from the group consisting of hydrogen, hydroxy, C_1 - C_2 alkoxy, amino, carboxy, diamino C_1 - C_2 alkoxy, halo, 2-propenoxy, iso C_3 - C_4 ~~alkyl~~carboxy alkoxycarbonyl C_1 - C_2 alkoxy, and di C_1 - C_2 alkylamino;

R^7 is selected from the group consisting of hydrogen, hydroxy, C_1 - C_2 alkoxy, hydroxy C_1 - C_2 alkoxy, C_1 - C_2 alkoxy C_1 - C_2 alkoxy, amino C_1 - C_2 alkoxy, morpholino C_1 - C_2 alkoxy, carboxyl C_1 - C_2 alkoxy, pyrrolidyl C_1 - C_2 alkoxy, di C_1 - C_2 alkylamino C_1 - C_2 alkoxy, pyrrolidyl C_1 - C_2 alkyl, iso C_3 - C_4 ~~alkyl~~carboxy alkoxycarbonyl C_1 - C_2 alkoxy, and 2-propenoxy,

where the R^6 and R^7 groups optionally join to form a six membered heterocyclic ring;

R^8 is selected from the group consisting of hydrogen, hydroxy, halo, C_1 - C_2 alkoxy, nitro, amino, and pyrrolidyl C_1 - C_2 alkoxy; and

G is selected from the group consisting of oxygen and sulfur;

when G is sulfur, each of R^9 and R^{10} is optionally absent, or is oxo;

when G is oxygen, R^9 and R^{10} are absent.

7. **(currently amended)** The aminocyanopyridine having the structure shown in claim 1, where:

R^1 is hydrogen;

R^2 is selected from the group consisting of hydrogen, C_1 - C_3 alkyl, hydroxy C_1 - C_2 alkyl, C_1 - C_2 alkoxyphenyl, C_1 - C_2 alkoxy C_1 - C_2 alkyl, and amino C_1 - C_2 alkyl;

R^3 and R^4 are each ~~independently selected from the group consisting of~~ hydrogen, ~~and~~ ~~di~~cyanoethyl;

R^5 is selected from the group consisting of hydrogen, and hydroxy;

R^6 is selected from the group consisting of hydrogen, hydroxy, C_1 - C_2 alkoxy, amino, carboxy, diamino C_1 - C_2 alkoxy, halo, 2-propenoxy, iso C_3 - C_4 ~~alkyl~~carboxy alkoxycarbonyl C_1 - C_2 alkoxy, and di C_1 - C_2 alkylamino;

R⁷ is selected from the group consisting of hydrogen, hydroxy, C₁-C₂ alkoxy, hydroxy C₁-C₂ alkoxy, C₁-C₂ alkoxy C₁-C₂ alkoxy, amino C₁-C₂ alkoxy, morpholino C₁-C₂ alkoxy, carboxyl C₁-C₂ alkoxy, pyrrolidyl C₁-C₂ alkoxy, di C₁-C₂ alkylamino C₁-C₂ alkoxy, pyrrolidyl C₁-C₂ alkyl, iso C₃-C₄ ~~alkyl~~carboxy alkoxycarbonyl C₁-C₂ alkoxy, and 2-propenoxy,

where the R⁶ and R⁷ groups optionally join to form a six membered heterocyclic ring;

R⁸ is selected from the group consisting of hydrogen, hydroxy, halo, methoxy, nitro, and amino; and

G is selected from the group consisting of oxygen and sulfur;

when G is sulfur, each of R⁹ and R¹⁰ is optionally absent, or is oxo;

when G is oxygen, R⁹ and R¹⁰ are absent.

8. **(currently amended)** An aminocyanopyridine compound that is selected from the group consisting of:

2,4-diamino-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7,8-dihydroxy-4-[(2-hydroxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7,8-dihydroxy-4-(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-4-(ethylamino)-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-fluoro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-hydroxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

8,10-diamino-2,3-dihydro-11H-[1,4]dioxino[2',3':6,7]chromeno[2,3-b]pyridine-9-carbonitrile,

2,4,7-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile

2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-ethoxyethoxy)-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-hydroxy-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-6,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-ethoxy-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-ethoxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-aminoethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridine-7-carboxylic acid,
2,4-diamino-8,9-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-morpholin-4-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
[(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-8-yl)oxy]acetic acid,
2,4-diamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-pyrrolidin-1-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-(methylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-[2-(dimethylamino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-8-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-diamino-7,8-di[2-(amino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-nitro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-[(4-methoxyphenyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-hydroxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2(2,4-diamino-3-cyano-7-bromo-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2-amino-8-ethoxy-4-(ethylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,9-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-[(4-methoxyphenyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-diamino-9-hydroxy-8-(piperidin-1-ylmethyl)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

7,8-bis(allyloxy)-2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-8-(2-ethoxyethoxy)-4-[(2-ethoxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
tert-butyl {[2,4-diamino-7-(2-tert-butoxy-2-oxoethoxy)-3-cyano-5H-chromeno[2,3-b]pyridin-8-yl]oxy}acetate,
2-amino-4-[(2-aminoethyl)amino]-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-8-hydroxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4,7-triamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,
2,4-diamino-7-bromo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-hydroxy-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-(dimethylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-9-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2-amino-4-(benzylamino)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
8-(allyloxy)-2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-fluoro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-(2-pyrrolidin-1-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-nitro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-10-methyl-5,10-dihydrobenzo[b]-1,8-naphthyridine-3-carbonitrile,
[(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-9-yl)oxy]acetic acid,
2-amino-4-{[2-(dimethylamino)ethyl]amino}-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-nitro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,
2,4-diamino-7-phenyl-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-chloro-9-methyl-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-fluoro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,
8-ethoxy-2,4-bis(ethylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-5-(2-fluoro-phenyl)-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-(2-hydroxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-(2-aminoethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-chloro-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-bis{[2-(dimethylamino)ethyl]amino}-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-4-{[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)ethyl]amino}-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-fluoro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-bromo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-(pyridin-4-ylmethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-chloro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-tert-butyl-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
ethyl 2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridine-9-carboxylate,
2,4-diamino-9-[2-(dimethylamino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-bis(butylamino)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-4-(butylamino)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
7,8-dimethoxy-2,4-bis(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-bis(ethylamino)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-4-(ethylamino)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-6,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-(trifluoromethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-bromo-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-methoxy-7-nitro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
7,9-diamino-10H-[1,3]dioxolo[6,7]chromeno[2,3-b]pyridine-8-carbonitrile,
7,9-diamino-10H-[1,3]dioxolo[6,7]chromeno[2,3-b]pyridine-8-carbonitrile,
2,4-diamino-8-methyl-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
7,8-dimethoxy-2,4-bis[(2-methoxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7,8-dimethoxy-4-[(2-methoxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7,8-dimethoxy-4-[(2-pyrrolidin-1-ylethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

7,8-dimethoxy-2,4-bis[(2-pyrrolidin-1-ylethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-bis(glyciny)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

N-(2-amino-3-cyano-7,8-dimethoxy-5H-chromeno[2,3-b]pyridin-4-yl)glycine,

2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridine-9-carboxylic acid,

2,4-diamino-6-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-bromo-7-chloro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-bis(ethylamino)-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-6-bromo-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-hydroxy-7,9-bis(piperidin-1-ylmethyl)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-5-phenyl-8-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-5-(3-fluoro-phenyl)-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-hydroxy-6,8-bis(piperidin-1-ylmethyl)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-bromo-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-5-phenyl-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-fluoro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,

2,4-diamino-7-nitro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-methoxy-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,

2,4-diamino-7-methoxy-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,

2,4-diamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-fluoro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,

~~2-amino-7,9-dimethyl-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,~~

~~2-amino-7-isopropyl-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,~~

~~2-amino-7-ethyl-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,~~
~~2-amino-7-methyl-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,~~
~~2-amino-7-chloro-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,~~
~~2-amino-7-bromo-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,~~
~~2-amino-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,~~ and
~~3-amino-5H-pyrido[3,4-b][1,4]benzothiazine-4-carbonitrile~~ prodrugs, salts,
tautomers, and combinations thereof.

9. (original) The aminocyanopyridine compound according to claim 8, wherein the compound is selected from the group consisting of:

2,4-diamino-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dihydroxy-4-[(2-hydroxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dihydroxy-4-(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-4-(ethylamino)-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-fluoro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-hydroxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
8,10-diamino-2,3-dihydro-11H-[1,4]dioxino[2',3':6,7]chromeno[2,3-b]pyridine-9-carbonitrile,
2,4,7-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile
2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-ethoxyethoxy)-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-hydroxy-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-6,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-ethoxy-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-ethoxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-aminoethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridine-7-carboxylic acid,
2,4-diamino-8,9-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-morpholin-4-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
[(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-8-yl)oxy]acetic acid,
2,4-diamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-pyrrolidin-1-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-(methylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-[2-(dimethylamino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-8-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-diamino-7,8-di[2-(amino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-nitro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-[(4-methoxyphenyl)amino]-5H-chromeno[2,3-b]pyridine-3-
carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-hydroxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2(2,4-diamino-3-cyano-7-bromo-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2-amino-8-ethoxy-4-(ethylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,9-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-[(4-methoxyphenyl)amino]-5H-chromeno[2,3-b]pyridine-3-
carbonitrile,
2(2,4-diamino-3-cyano-7-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-diamino-9-hydroxy-8-(piperidin-1-ylmethyl)-5H-chromeno[2,3-b]pyridine-3-
carbonitrile,
7,8-bis(allyloxy)-2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-8-(2-ethoxyethoxy)-4-[(2-ethoxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-
carbonitrile,

tert-butyl {[2,4-diamino-7-(2-tert-butoxy-2-oxoethoxy)-3-cyano-5H-chromeno[2,3-b]pyridin-8-yl]oxy}acetate,

2-amino-4-[(2-aminoethyl)amino]-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2(2,4-diamino-3-cyano-8-hydroxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,

2,4,7-triamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,

2,4-diamino-7-bromo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7,8-dimethoxy-4-(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-hydroxy-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-(dimethylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2(2,4-diamino-3-cyano-9-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,

2-amino-4-(benzylamino)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

8-(allyloxy)-2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-fluoro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-(2-pyrrolidin-1-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-nitro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-10-methyl-5,10-dihydrobenzo[b]-1,8-naphthyridine-3-carbonitrile,

[(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-9-yl)oxy]acetic acid,

2-amino-4-{[2-(dimethylamino)ethyl]amino}-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-nitro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,

2,4-diamino-7-phenyl-5H-chromeno[2,3-b]pyridine-3-carbonitrile, and

prodrugs, salts, tautomers, and combinations thereof.

10. (original) The aminocyanopyridine compound according to claim 8, wherein the compound is selected from the group consisting of:

2,4-diamino-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7,8-dihydroxy-4-[(2-hydroxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7,8-dihydroxy-4-(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-4-(ethylamino)-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-fluoro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-hydroxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

8,10-diamino-2,3-dihydro-11H-[1,4]dioxino[2',3':6,7]chromeno[2,3-b]pyridine-9-carbonitrile,

2,4,7-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile

2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-ethoxyethoxy)-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-hydroxy-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-6,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-ethoxy-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-ethoxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-aminoethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridine-7-carboxylic acid,

2,4-diamino-8,9-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-morpholin-4-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

[(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-8-yl)oxy]acetic acid,

2,4-diamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-pyrrolidin-1-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7,8-dimethoxy-4-(methylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-[2-(dimethylamino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4,7-triamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2(2,4-diamino-3-cyano-8-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,

2,4-diamino-7,8-di[2-(amino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-nitro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-[(4-methoxyphenyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-hydroxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2(2,4-diamino-3-cyano-7-bromo-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2-amino-8-ethoxy-4-(ethylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,9-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-[(4-methoxyphenyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-diamino-9-hydroxy-8-(piperidin-1-ylmethyl)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
7,8-bis(allyloxy)-2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-8-(2-ethoxyethoxy)-4-[(2-ethoxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile, and
prodrugs, salts, tautomers, and combinations thereof.

11. (original) The aminocyanopyridine compound according to claim 8, wherein the compound is selected from the group consisting of:

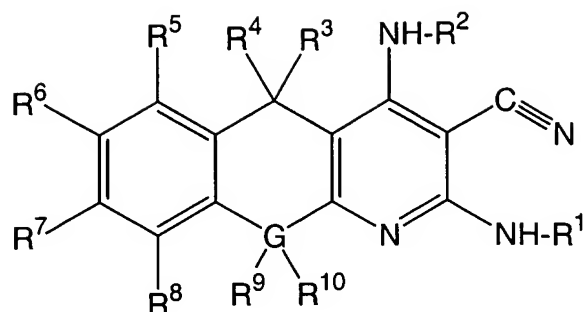
2,4-diamino-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dihydroxy-4-[(2-hydroxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dihydroxy-4-(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-4-(ethylamino)-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-fluoro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-hydroxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
8,10-diamino-2,3-dihydro-11H-[1,4]dioxino[2',3':6,7]chromeno[2,3-b]pyridine-9-carbonitrile,

2,4,7-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile
2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-ethoxyethoxy)-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-hydroxy-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-6,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-ethoxy-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-ethoxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-aminoethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridine-7-carboxylic acid,
2,4-diamino-8,9-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-morpholin-4-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
[(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-8-yl)oxy]acetic acid,
2,4-diamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-pyrrolidin-1-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-(methylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-[2-(dimethylamino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-8-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile, and
prodrugs, salts, tautomers, and combinations thereof.

Claims 12-18 (canceled).

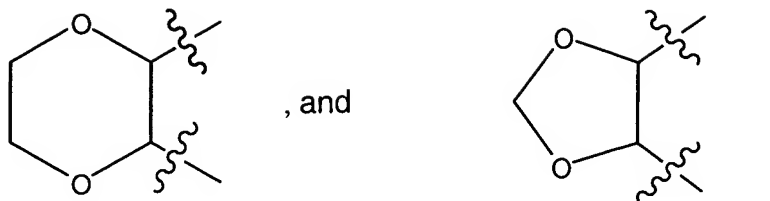
19. **(currently amended)** A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an aminocyanopyridine MK-2 inhibiting compound having the structure:



wherein:

each of R^1 , R^2 , $[R^3, R^4]$, R^5 , R^6 , R^7 , and R^8 is independently selected from the group consisting of hydrogen, hydroxy, amino, halo, nitro, branched or unbranched C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_1 - C_6 alkoxy, hydroxy C_1 - C_6 alkyl, hydroxy C_1 - C_6 alkoxy, C_1 - C_6 alkoxy C_1 - C_6 alkoxy, C_1 - C_6 alkoxy C_1 - C_6 alkyl, C_1 - C_6 alkenoxy, branched or unbranched amino C_1 - C_6 alkyl, diamino C_2 - C_6 alkyl, C_1 - C_6 alkylamino C_1 - C_6 alkyl, C_1 - C_6 alkylamino, di-(C_1 - C_6 alkyl)amino, C_1 - C_4 alkoxyarylamino, C_1 - C_4 alkoxyalkylamino, amino C_1 - C_6 alkoxy, di-(C_1 - C_4 alkylamino, C_2 - C_6 alkoxy, di-(C_1 - C_6 alkyl)amino C_1 - C_6 alkyl, C_1 - C_6 alkylamino C_1 - C_6 alkoxy, halo C_1 - C_6 alkoxy, dihalo C_1 - C_6 alkoxy, trihalo C_1 - C_6 alkoxy, cyano C_1 - C_6 alkyl, dicyano C_1 - C_6 alkyl, cyano C_1 - C_6 alkoxy, dicyano C_1 - C_6 alkoxy, carbamyl C_1 - C_4 alkoxy, heterocyclyl C_1 - C_4 alkoxy, heteroaryl C_1 - C_4 alkoxy, sulfo, sulfamyl, C_1 - C_4 alkylaminosulfonyl, hydroxy C_1 - C_4 alkylaminosulfonyl, di-(C_1 - C_4 alkyl)aminosulfonyl, C_1 - C_4 alkylthio, C_1 - C_4 alkylsulfonyl, C_1 - C_4 alkylsulfinyl, aryl, aryl C_1 - C_6 alkyl, heterocyclyl C_1 - C_6 alkyl, heteroaryl C_1 - C_6 alkyl, heterocyclyl C_1 - C_6 alkoxy, heteroaryl C_1 - C_6 alkoxy, aryl C_1 - C_6 alkoxy, where the aryl ring can be substituted or unsubstituted, and, if substituted, the substituent group is selected from one or more of the group consisting of C_1 - C_6 alkyl, halo, amino, and C_1 - C_6 alkoxy, substituted or unsubstituted C_3 - C_6 cyclyl, C_3 - C_6 heterocyclyl, and, if substituted, the substituent group is selected from one or more of the group consisting of C_1 - C_6 alkyl, C_1 - C_6 alkoxy, halo, amino, and where the C_3 - C_6 heterocyclyl ring contains O, S, or N, branched or unbranched C_1 - C_6 alkoxycarbonyl C_1 - C_6 alkoxy, and carboxy, carboxy C_1 - C_6 alkoxy, carboxy C_1 - C_6 alkyl, hydroxy C_1 - C_4 alkoxycarbonyl, C_1 - C_4 alkoxycarbonyl,

where R^6 and R^7 are such that they optionally join to form a ring system of the type selected from



R³ and R⁴ are independently selected from the group consisting of hydrogen, hydroxy, amino, halo, nitro, branched or unbranched C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₆ alkoxy, hydroxy C₁-C₆ alkyl, hydroxy C₁-C₆ alkoxy, C₁-C₆ alkoxy C₁-C₆ alkoxy, C₁-C₆ alkoxy C₁-C₆ alkyl, C₁-C₆ alkenoxy, branched or unbranched amino C₁-C₆ alkyl, diamino C₂-C₆ alkyl, C₁-C₆ alkylamino C₁-C₆ alkyl, C₁-C₆ alkylamino, di-(C₁-C₆ alkyl)amino, C₁-C₄ alkoxyarylamino, C₁-C₄ alkoxyalkylamino, amino C₁-C₆ alkoxy, di-(C₁-C₄ alkylamino, C₂-C₆ alkoxy, di-(C₁-C₆ alkyl)amino C₁-C₆ alkyl, C₁-C₆ alkylamino C₁-C₆ alkoxy, halo C₁-C₆ alkoxy, dihalo C₁-C₆ alkoxy, trihalo C₁-C₆ alkoxy, cyano C₁-C₆ alkyl, cyano C₁-C₆ alkoxy, dicyano C₁-C₆ alkoxy, carbamyl C₁-C₄ alkoxy, heterocyclyl C₁-C₄ alkoxy, heteroaryl C₁-C₄ alkoxy, sulfo, sulfamyl, C₁-C₄ alkylaminosulfonyl, hydroxy C₁-C₄ alkylaminosulfonyl, di-(C₁-C₄ alkyl)aminosulfonyl, C₁-C₄ alkylthio, C₁-C₄ alkylsulfonyl, C₁-C₄ alkylsulfinyl, aryl, aryl C₁-C₆ alkyl, heterocyclyl C₁-C₆ alkyl, heteroaryl C₁-C₆ alkyl, heterocyclyl C₁-C₆ alkoxy, heteroaryl C₁-C₆ alkoxy, aryl C₁-C₆ alkoxy, where the aryl ring can be substituted or unsubstituted, and, if substituted, the substituent group is selected from one or more of the group consisting of C₁-C₆ alkyl, halo, amino, and C₁-C₆ alkoxy, substituted or unsubstituted C₃-C₆ cyclyl, C₃-C₆ heterocyclyl, and, if substituted, the substituent group is selected from one or more of the group consisting of C₁-C₆ alkyl, C₁-C₆ alkoxy, halo, amino, and where the C₃-C₆ heterocyclyl ring contains O, S, or N, branched or unbranched C₁-C₆ alkoxycarbonyl C₁-C₆ alkoxy, and carboxy, carboxy C₁-C₆ alkoxy, carboxy C₁-C₆ alkyl, hydroxy C₁-C₄ alkoxycarbonyl, C₁-C₄ alkoxycarbonyl;

G is selected from the group consisting of oxygen, sulfur, and nitrogen;

when G is oxygen, R⁹ and R¹⁰ are absent;

when G is sulfur, each of R⁹ and R¹⁰ is optionally absent, or is oxo;

when G is nitrogen, R⁹ is absent, and R¹⁰ is C₁-C₄-alkyl.

Amendment A
10/729,598
January 18, 2005

Claim 20 (canceled).